## **REMARKS/ARGUMENTS**

Claims 1-4, 6-18 and 20-23 are pending and stand rejected.

This paper constitutes the fourth response submitted by the Applicant in this matter. In each response, the Applicant has specifically pointed out how the text portions of the Humphries, Eckel and Myron references cited and relied upon by the Examiner fail to teach what the Examiner has stated they taught. Unfortunately, instead of withdrawing each rejection, the Examiner often has maintained the rejection by citing to different text portions of these same reference(s) or to different combinations of these same references. In fact, the allowance of claims 11-17 and 23 has been withdrawn based upon a text portion of the Eckel reference previously cited, relied upon and discussed by the Examiner.

It is respectfully requested that the Examiner carefully review the text portions cited in the Office Action and Applicant's explanations of how these text portions do not support the Examiner's rejections, and that the rejections of the claims be withdrawn in their entirety.

# 1. Rejection of Claims 1-4, 6-8, 10, 18, 20 and 22 Under § 103(a)

Claims 1-4, 6-8, 10, 18, 20 and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,621,662 ("Humphries") in view of U.S. Patent No. 5,640,143 ("Myron"). The Applicant respectfully traverses this rejection.

### Claims 1, 3 18

These claims recite a room occupancy sensor having 1) a sensor for detecting motion in a room, with a sensitivity to the motion for triggering the room occupancy sensor, and 2) "a device for measuring ambient room temperature, wherein the sensitivity is adjusted in response to the measured ambient room temperature", or the method thereof. It is respectfully submitted that both Humphries and Myron fail to teach such an occupancy sensor where the sensitivity to motion of the sensor is adjusted in response to measured ambient room temperature.

The Examiner states that Col. 7, lines 26-37 of Myron teaches adjusting the sensitivity of a room occupancy sensor in response to measured ambient room temperature. However, that text merely discloses a light level sensing circuit for preventing the lights from going on if it is already bright enough in the room. With respect to claim 18, the Examiner states Col. 7, lines 13-25 of Myron teaches adjusting sensor trigger sensitivity in response to measured temperature. However, that text merely teaches turning off the microprocessor and controlling electrical loads (e.g. air conditioning and heating) as the temperature rises.

#### Claims 2 and 4

These claims recite that the sensitivity (of the sensor) increases as ambient room temperature increases, which neither Humphries or Myron teach or suggest. The Examiner cites Col. 7, lines 13-25, but this text merely teaches turning off the microprocessor and controlling electrical loads (e.g. air conditioning and heating) as the temperature rises.

#### Claims 6-7

Claim 6 recites a home automation system having controlled objects, room motion sensors, and "a controller for controlling the controlled objects in response to detected occupancy by the plurality of room motion sensors; wherein at least one of the room motion sensors includes a sensor for detecting motion in one of the rooms, the sensor having a sensitivity to the motion for triggering the room occupancy sensor, and wherein the sensitivity is adjustable in response to signals from the controller", which neither Humphries or Myron teach or suggest. The Examiner cites Col. 11, lines 49-62 as teaching the claimed sensitivity adjustment. However, this text merely teaches the sensor's microcontroller is adjusting a threshold sensitivity. The sensor's microcontroller is not a controller that controls controlled objects, as recited in claim 6. Therefore, even if the Myron motion sensor were combined with the Humphries home automation system as suggested by the Examiner, there still is no suggestion of adjusting the motion detector's sensitivity in response to signals from a controller

of controlled objects. Thus, it is submitted that claim 6, and claims 7-8 and 10 dependent thereon, are not rendered obvious.

#### Claims 8, 10, 20, 22

These claims recite the concept of adjusting the sensitivity of a motion detecting sensor *in response to other sensors* (movement through doorway detected by entry/exit sensor as recited in claims 8 and 20, or a home parameter determined by a status sensor as recited in claims 10 and 22). It is respectfully submitted that neither Humphries or Myron teach or suggest these concepts. The Examiner cites Col. 12, lines 5-10 of Myron, but this text merely teaches changing directional bias to change directional sensitivity. The Examiner also cites Col. 11, lines 49-60 of Myron, but this text merely teaches changing sensitivity based upon lack of occupancy.

For the reasons set forth above, it is respectfully submitted that a close analysis of the text relied upon by the Examiner should result in the conclusion that claims 1-4, 6-8, 10, 18, 20 and 22 are not rendered obvious by Humphries and Myron, and that this rejection should be withdrawn in its entirety.

## 2. Rejection of Claim 9 under § 103(a)

Claim 9 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries and Myron, and further in view of JP 06230144 ("Shimizu"). The Applicant respectfully traverses this rejection.

Neither Humphries or Myron teach or suggest the concept of adjusting the sensitivity of a motion detecting sensor in response to <u>other sensors</u> (e.g. occupancy of specific location in a room detected by spot sensor as recited in claim 9) as shown above in Part 1. The addition of Shimizu fails to cure the deficiencies of Humphries and Myron.

## 3. Rejection of Claims 11-14 and 23 under § 103(a)

The allowance of claims 11-14 and 23 has been withdrawn, and these claims now stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel. The Examiner states the basis for the withdraw of the allowance is in view of "newly discovered [sic] in the previously cited references to Eckel et al. .... and Shimizu Japanese patent....". This new basis of rejection is not understood, since the text citations supporting the new rejections are the same text citations originally cited by the Examiner, and overcome by the Applicant. Specifically, it appears the Examiner now primarily relies on Col. 23, lines 58-64 of Eckel for supporting the rejections. Yet that exact text was previously cited and discussed by the Examiner in previously rejecting claims 14-17, and was subsequently overcome by the Applicant's arguments.

Notwithstanding the above, as argued previously, Applicant will again specifically point out how the cited text relied upon by the Examiner fails to teach or suggest the limitations of the rejection claims.

#### Claims 11-12 and 23

These claims recite an occupancy sensor that includes "a sensor for detecting motion in a room, and a <u>filter mechanism</u> (associated with the room) for triggering the room occupancy (motion) sensor only in response to repeated motion detections (by the sensor) that exceed a predetermined number, that are each separated apart by a predetermined separation time period, and that all occur within a predetermined group time period", or the method thereof. The Examiner admits that Humphries fails to teach the claimed filter mechanism, but states that Eckel does. The Applicant respectfully disagrees. Eckel in fact teaches programming microprocessor 70 to operate in a tolerant zone, which requires the motion sensor output signal to be characterized by a greater magnitude, duration, frequency, duty cycle or slew rate (see col. 23 lines 26-64). These parameters from Eckel are distinguishable from, and inferior to, the parameters used by the claimed filter mechanism, which uses the combination of number (of

detections), separation time period (between detections), and group time period (within which detections must occur) to trigger the motion sensor (as explained on page 10, lines 12-32 of the specification). It has been found that this combination of parameters significantly reduces the instances of false positives, and the combination of Humphries and Eckel simply do not contemplate utilizing the claimed combination of parameters to trigger a motion sensor.

The Examiner now states col. 23, lines 58-64 of Eckel teach the claimed filter mechanism. The Applicant respectfully traverses this conclusion. This text in its entirety reads:

The numerical occurrences of these slew rates can be selectively counted by a counter 292. The output of the counter (e.g., 1 to X counts) becomes a valid occupant signal VOS. In addition, the counter provides added verification since it requires multiple dv/dt's (count>1) and therefore provides filtering to reduce false VOS due to outside noise mechanisms.

This text merely teaches an occupant signal based on count, and filtering/verification by requiring a count greater than 1. It is unclear on what basis the Examiner can possibly find a teaching within this text of the claimed filter mechanism using the combination of **number** of detections, separation time period between detections, and group time period within which detections must occur.

### Claims 13-14

Claims 13-14 depend upon allowable claim 12, and are therefore considered allowable as well. Further, the combination of Humphries and Eckel fails to teach or suggest the elements of these dependent claims. For example, claim 14 recites that the controller for the controlled objects "counts the number of the repeated motion detections, determines the time separation between the repeated motion detections, and determines the time period in which all the repeated motion detections occur; and the controller determines that the room motion sensor is triggered when the counted motion detections exceed the predetermined number, are separated apart by the predetermined separation time period, and all occur within the predetermined group time period." As stated above, the portions of Eckel relied upon by the Examiner simply

do not contemplate using the combination of *detection number*, *time separation* and *group time* period as recited in claim 14.

It is therefore respectfully submitted that this rejection of claims 11-14 and 23 should be withdrawn in its entirety.

# 4. Rejection of Claim 16 under § 103(a)

The allowance of claim 16 has been withdrawn, and is now rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel and Shimizu. Claim 16 depends upon claim 12, and is deemed allowable for the reasons set forth above in Part 3.

## 5. Rejection of Claim 21 under § 103(a)

Claim 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Myron and Shimizu.

Similar to claim 9, claim 21 recites the concept of adjusting the trigger sensitivity of a room motion sensor *in response to other sensors* (occupancy of specific location in a room detected by spot sensor). Thus, for the reasons set forth above in Parts 1 and 2 with respect to claim 9, it is respectfully submitted that claim 21 is not rendered obvious by Humphries and Myron. The addition of Shimizu fails to cure the deficiencies of Humphries and Myron.

## 6. Rejection of Claims 15 and 17 Under § 103(a)

Claims 15 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Humphries in view of Eckel and Myron. The Applicant respectfully traverses this rejection.

Claims 15 and 17 depend from claim 12, which is deemed allowable for the reasons set forth above in Part 3 with regard to claim 12. In addition, the references cited by the Examiner fail to teach or suggest the elements of claims 15 and 17. Specifically, claims 15 and 17 recite adjusting at least one of the filter mechanism parameters (number, time separation, group time period) in response to detected movement by an entry/exit sensor (claim 15) or a status sensor

(claim 17). The Applicant traverses the rejection of these claims for the reasons set forth above in Parts 1 and 2 with respect to claims 8-9 (Humphries and Eckel do not teach or suggest changing the sensitivity of one sensor based upon detected movement/presence by another sensor, and the addition of Myron fails to cure such deficiencies), and in Part 3 above with respect to claim 11 (Humphries and Eckel do not teach or suggest a filter mechanism for a motion sensor utilizing a predetermined *number*, predetermined *time period* and predetermine *group time period* for triggering that motion sensor, and the addition of Myron fails to cure such deficiencies). Humphries, Eckel and Myron simply fail to suggest modifying the *number*, *time period* and *group time period* for a motion sensor, let alone in response to detected movement by an entry/exit sensor or a status sensor as recited in claims 15 and 17.

For these reasons, it is respectfully submitted that the rejection of claims 15 and 17 should be withdrawn in its entirety.

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For the foregoing reasons, it is respectfully submitted that the claims are in an allowable form, and action to that end is respectfully requested.

Respectfully submitted,

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